

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/051437

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F27D3/18 F27B3/22 C21C5/52

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F27D F27B C21C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/000338 A1 (V.G. SHVER) 2 January 2003 (2003-01-02) figures 10,11 paragraph '0019! paragraphs '0024! - '0026! paragraph '0035! paragraph '0066! paragraph '0074! paragraph '0096!	1-15
Y	DE 41 23 391 A1 (ELTI S.R.L., SOVERE, IT) 23 January 1992 (1992-01-23) column 3, line 14 - line 55 column 4, line 54 - line 61 figures 4-7 ----- -/-	1-15



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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- *P* document published prior to the international filing date but later than the priority date claimed

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- *&* document member of the same patent family

Date of the actual completion of the international search

24 February 2005

Date of mailing of the international search report

02/03/2005

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Information on patent family members

International Application No

PCT/EP2004/051437

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2003000338	A1	02-01-2003	US	2001043639 A1	22-11-2001
			US	2002001332 A1	03-01-2002
			US	6289035 B1	11-09-2001
			US	2005005735 A1	13-01-2005
			CA	2449774 A1	12-12-2002
			WO	02099143 A1	12-12-2002
			EP	1413174 A1	28-04-2004
			AU	3484401 A	20-08-2001
			EP	1232675 A1	21-08-2002
			WO	0160123 A1	16-08-2001
DE 4123391	A1	23-01-1992	IT	1242979 B	18-05-1994
US 5788921	A	04-08-1998	US	5714113 A	03-02-1998
			US	5599375 A	04-02-1997
			US	5904895 A	18-05-1999
			US	5858302 A	12-01-1999
			US	5954855 A	21-09-1999
			US	5843368 A	01-12-1998
			AU	3500995 A	22-03-1996
			CA	2198901 A1	07-03-1996
			DE	69524233 D1	10-01-2002
			DE	69524233 T2	23-05-2002
			EP	1123982 A1	16-08-2001
			EP	0777751 A1	11-06-1997
			WO	9606954 A1	07-03-1996
US 5635130	A	03-06-1997	AT	195765 T	15-09-2000
			CA	2222750 A1	19-12-1996
			DE	69609970 D1	28-09-2000
			DE	69609970 T2	04-01-2001
			EP	0832305 A1	01-04-1998
			ES	2151174 T3	16-12-2000
			JP	10510325 T	06-10-1998
			JP	3604698 B2	22-12-2004
			WO	9641028 A1	19-12-1996
US 2178654	A	07-11-1939	NONE		
FR 2767840	A	05-03-1999	FR	2767840 A1	05-03-1999
			AU	9079098 A	22-03-1999
			WO	9911827 A1	11-03-1999
FR 2797738	A	23-02-2001	FR	2797738 A1	23-02-2001